

Traffic and Transportation

Introduction

In recent years, Antrim has begun to experience many of the stresses associated with an influx of both residential and commercial development in the community and the region. The Community Survey and Workshops conducted by the Master Plan Committee as part of this master plan update indicate that the community characteristics most valued by Antrim's residents are its rural character and small town atmosphere. Antrim's transportation system and its connections to the regional and state network provide access to the goods and services that residents and commerce require. It plays a large role in the development of the town, and in defining the town's character. As development continues, balancing the desires of residents to maintain our rural character with the increasing demand on the transportation system will be vital to Antrim's future.

With State Highway Routes 202 and 9 running through the town and with commercial development to the north in Hillsboro, concern has arisen among Antrim's residents regarding the level of traffic passing through town and the resulting impact on Main Street and other areas. During the visioning process, residents also indicated their love of Antrim's dirt roads and back roads. Concern has also been expressed in regard to



transportation for various segments of the population, including teens, the handicapped, and seniors. Plans and proposals for future growth and development, as well as our aging population, may impact the transportation systems in various ways. This section is intended to plan for that future.

A viable thoroughfare and transportation system is the most significant public investment in the physical development of a town. The existing transportation network, which in the case of Antrim refers exclusively to the system of roads and highways, has a profound influence on the location and development of land use throughout the town. All land use activities require access to adequate transportation routes and are most likely to locate where access is the easiest and least costly. Land use changes have the potential to reduce existing traffic capacity, to increase delays and congestion on existing roadways, and to increase the footprint of roadway infrastructure necessary to accommodate the change in use. Likewise, transportation improvements have the potential to alter existing land use patterns by opening up once inaccessible areas, either by the construction of new roads or the upgrading of deficient roads.

Because of the financial commitment required for the improvement and maintenance of a road network and the direct relationship between land use patterns and traffic circulation, the identification and analysis of current transportation needs is crucial to the orderly accommodation of growth and development. This section of the master plan is intended to provide such an analysis. A corollary purpose of this document is to enable the town of Antrim to fully participate in all levels of transportation planning - local, regional, state, and federal.

The goal of this chapter is to examine how to meet the various transportation needs of Antrim's citizens and to ensure that the traffic and transportation infrastructure and systems in Antrim are safe, efficient, reliable and accessible while maintaining and enhancing the environment, the rural character, and the small town quality of life in Antrim.

Existing Transportation Facilities

There are approximately 66 miles of roads within Antrim, of which about 48 miles are municipally maintained roads. Of those 48 miles of municipally maintained roads, half are paved and half are unpaved. The remaining 16 miles of road are composed of State of New Hampshire roadways.

The major arteries of the road network in Antrim are US Route 202, posted as an east-west road in New Hampshire, but running through Antrim as a north-south corridor, and the State Highways: NH Route 9, NH Route 31, and NH Route 123.

In 1996 Antrim initiated a highway rehabilitation program to upgrade existing substandard town roadways. The goal of this plan is to prioritize and complete necessary road improvements over a number of years in order to avoid spikes in funding requests. The plan provides a solid framework for making budgeting decisions for roadway-related capital expenditures. It does not include general maintenance activities handled under the Highway Department budget.

Classification of Highways and Roads

The State Aid classification system, which is identified by RSA 229:5 and 229:231, establishes responsibility for construction, reconstruction, and maintenance as well as eligibility for use of State Aid funds. This classification system, more fully described in Appendix 10, also provides a basic hierarchy of roadways. The following is a description of the State Aid system:

Class I: Trunk Line Highways. Class I consists of all existing or proposed highways on the primary state highway system, excepting all portions of the highways within the compact sections of cities and towns. The state assumes full control and pays costs of construction, reconstruction and maintenance of its sections with the assistance of federal aid. Routes 9 and 202 are examples of Class I highways in Antrim.

Class II: State Aid Highways. Class II highways are all existing or proposed highways on the secondary state highway system, excepting portions of the highways within the compact sections of cities and towns, which are classified as Class IV highways. All sections improved to the state standards are maintained and reconstructed by the state. All other sections must be maintained by the city or town in which they are located until brought up to state standards. The same applies to bridges on Class II highways. Routes 31 and 123 are examples of Class II highways in Antrim.

Class III: Recreational Roads consist of all roads leading to, and within, state reservations designated by the Legislature. NHDOT assumes full control of reconstruction and maintenance. Antrim does not have any Class III roads.

Class III-a: New boating access highways from any existing highway to any public water in this state. All Class III-a highways are limited access facilities as defined in RSA 230:44. Antrim does not have any Class III-a roads.

Class IV: Town and City Streets consist of all highways within the compact sections of cities and towns listed in RSA 229:5. Extensions of Class I (excluding turnpikes and interstate portions) and Class II highways through these areas are included in the classification. Antrim is not included in the designated towns for this classification.

Class V: Rural Highways consist of all other traveled highways that the town has the duty to maintain regularly.

Class VI: Unmaintained Highways are all other existing public ways, including highways discontinued as open highways and made subject to gates and bars, and highways not maintained and repaired in suitable condition for travel thereon by the town for five (5) or more successive years. However, if a city or town accepts from the state a Class V highway established to provide a property owner or property owners with highway access to such property because of a taking under RSA 231:14, then notwithstanding RSA 229:5, VII, such a highway shall not lapse to Class VI status due to failure of the city or town to maintain and repair it for five (5) successive years, and the municipality's duty of maintenance shall not terminate, except with the written consent of the property owner or property owners.

Of the seven (7) possible state classifications, Antrim roads fall into four of these: Class I, Class II, Class V, and Class VI roads. Antrim's road system is typical of most New Hampshire towns, in that the most mileage is accounted for by Class V roads. The Class VI designation is frequently applied to roads that have been abandoned or discontinued, which often leads to confusion as to the ownership of the road. If a vote was taken at a town meeting to formally discontinue a road (or "throw it up"), that road is no longer a public way. It then belongs to the abutting landowners.

State and Federal Highways

NH Route 9 and US Route 202, while measuring only about 12 miles in length in Antrim, represent two significant travel corridors. Route 9 is officially designated as a “Major Arterial” Class I highway and is a principal highway for east-west travel through southern New Hampshire. Route 9 connects I-89 and I-93 to the east with I-91 to the west. In addition, Route 9 was designated in 1995 as part of the National Highway System, along with NH 101 and NH 12 south of Keene in the Monadnock region. The “Hillsborough Bypass” was completed in 2002, and more recently a major resurfacing of the highway from Hillsborough to Stoddard was completed in 2003. Traffic volumes and vehicular speed have increased since completion of these projects.

Antrim’s zoning along the 5.72 mile length of Route 9 falls into three categories for the 11.44 miles of frontage: commercial (8.04 miles); conservation (1.6 miles) and residential (1.8 miles). In Antrim, the highway is generally considered suitable for the safe conveyance of up to 20,000 vehicles per day. The traffic volumes on Route 9 through Antrim generally range from 4,500 to 6,000 vehicles per day (varying with the day of the week and location on Route 9). Therefore, the expected lifespan of the highway in its current configuration is several decades if its safety and capacity are well managed.

Route 202 traverses Antrim from north to south, and is a federal highway. It is classified as a Minor Arterial, funneling traffic to the “higher order” arterials of Routes, 9, 10 and 12. A Route 202 Corridor Study completed in 2002 by Southwest Regional Planning found that average daily traffic in Antrim on Route 202 ranges from a low of about 5,500 at the Antrim/Hillsborough town line to a peak of 8,057 south of NH 31. The corridor study also noted the generalized zoning acreage in Antrim’s Route 202 corridor: commercial: 1,571 acres; rural: 402 acres, residential: 163 acres, and other: 29 acres, for a total of 2,164 acres. This is in contrast to the other towns in the corridor, whose acreage in the Route 202 corridor is primarily rural and residential.

There has been much discussion regarding the impact that traffic has on Routes 9 and 202, and could have, on the town. Considering the importance of these highways to the regional and state transportation system, concern has been expressed as to the potential for “strip mall” or “sprawl” development to occur in the commercial zones along these highways. Many possibilities exist for Antrim to determine the way development proceeds along these routes including “clustering” commercial development in particular areas and the use of common driveways, wooded buffers, and other appropriate regulations.

Municipal Roads

The greatest amount of mileage in town consists of Class V, town-maintained roads. Approximately half of the Class V roads have a paved surface, and the other half a gravel surface. The road types with the least amount of mileage in Antrim are the Class VI roads, accounting for only about six miles of road. The pressures surrounding development on Class VI roads faced by many towns have not yet become serious issues in Antrim. The

ownership and condition of these roads can become contentious issues when there is pressure on the Planning Board and Selectmen to allow development on these roads.

Road Network by Mileage and State Classification

Class I	NH Route 9	5.72
	US Route 202	6.24
	Total Class I:	11.96
Class II	NH Route 31	4.60
	NH Route 123	.61
	Total Class II:	5.21
Class V		42.03
<u>Class VI</u>		6.37
Total Mileage, all class roads		65.57

Source: NHDOT Classified Road Mileage "RDF04", 1999

Functional Classification System

Every ten years, the New Hampshire Department of Transportation (NHDOT), working with the Regional Planning Agencies, updates the state's functional classification maps for highways. A functional classification system identifies roads by the type of service provided and by the role of each highway within the state system based on standards developed by the US Department of Transportation. While the state aid classification system outlined above is the primary basis for determining jurisdiction, the following system is important for determining eligibility for federal funds.

The purpose of this system is to correlate the land planning and traffic planning functions of the master plan. Recognition of the principal function that a highway, road, or street is intended to serve can reduce potential conflicts between land use activities and traffic movements. For example, from a theoretical standpoint, residential development should not be permitted or encouraged to locate indiscriminately along major highways. The reason for this is obvious due to the opportunity for direct land use/traffic conflicts. The need for direct access to residential properties causes numerous left turn and crossover movements as well as ingress/egress movements, all of which slow and/or interrupt the smooth flow of traffic and, at the same time, substantially increase the potential for accidents to both pedestrians and vehicles.

According to this system, there are two categories of functional classes: Rural Areas and Urban Areas. In Antrim's case, only the Rural categories apply. They are:

- Principal Arterial/ Controlled Access
- Other Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Local Streets and Roads

Principle Arterial/Controlled Access

These highways consist of interstates and some primary state routes. They are designed to move large volumes of truck and car traffic through and between population centers without disturbing local traffic and land uses. Controlled Access is a designation adopted by NHDOT, the effect of which is to minimize the frequency of curb cuts, thereby controlling the amount of traffic crossing lanes and stopping on the road. Antrim has no roads that fall into this category.

Arterial Systems

These roads carry the largest amount of traffic into and through a region. They may have limited or controlled driveway access for the purpose of providing unimpeded traffic flow. These roads typically carry high volumes of traffic for medium to long distances and at medium speeds. NH Route 9 is classified as a principal arterial, and US Route 202 as a minor arterial.

The Collector System (Major and Minor)

The collector system provides land access, service, and traffic circulation within residential neighborhoods, commercial and industrial areas. It differs from the arterial system in that collector streets may penetrate residential neighborhoods, distributing trips (traffic) from the arterials through the area to their ultimate destination. Conversely, collector streets also collect traffic from local streets in residential neighborhoods and channel it to the arterial system. These roads typically carry medium volumes of traffic at low to medium speeds for relatively short distances. NH Route 31 and 123 are classified as major collectors.

Local Streets and Roads

This system includes all streets not classified in one of the higher systems. Its primary function is to provide direct access to abutting properties and access to higher order systems. It offers the lowest level of mobility, and through traffic is usually deliberately discouraged.

Scenic Roads

A major component of a town's rural character can be its unpaved and scenic roads. These roads help to retain a sense of history and rural quality that Antrim's residents have indicated a strong desire to maintain. RSA 231:157 allows towns by a vote at town meeting to designate any road other than a Class I or II highway as a Scenic Road. A municipality may rescind its designation of a scenic road using the same procedure.

The effect of designation as a scenic road is that, except in emergency situations, there shall be no tree cutting of trees with a circumference of 15 inches at 4 feet from the ground or alteration of stone walls by the town or a public utility within the right-of-way without a hearing, review, and the written approval of the Planning Board. This law does not affect the rights of individual property owners; nor does it affect land uses as permitted by local zoning.

In recognition of the fact that the state law is not very stringent, the statute was amended in 1991 to allow towns to adopt provisions other than what is spelled out in the law. These additional regulations could include giving protection to smaller trees or by inserting criteria for the Planning Board to use in deciding whether to grant permission.

Antrim has a number of roads that have been designated through Town Meeting as Scenic. At this time, the following roads in Antrim are so designated:

Bridle Road (from Smith Road to Elm Avenue)	Old Hancock Road (from Route 31 to Town Line)
Craig Road	Old Pound Road
Elm Avenue	Pierce Lake Road
Liberty Farm Road	Reed Carr Road
Meeting House Hill Road (to cemetery)	Smith Road
Miltimore Road	Turner Hill Road
Old Brimstone Corner Road	Whiton Road
Old Carr Road	



Smith Road, designated as one of Antrim's Scenic Roads

Access Control

A related component of functional classification is level of access control. Access control manages the frequency of curb cuts along a highway. Curb cut densities are a principal determinant of safety and mobility on highways and preservation of functional classification relies in managing frequency of curb cuts. NHDOT has the authority to control access to and from state routes. There are three levels of access control:

Driveway Permits: All other access to state highways is managed through the state driveway permitting process. The principal criterion for permitting driveways is safety as a function of visibility, posted speed and functional classification with conventional distances of 400 feet on rural roads and 200 feet on urban roads.

Determinations for permitting are carried out by NHDOT Maintenance District personnel following application to NHDOT by property owners or developers.

Controlled Access: The points of access are predetermined and negotiated between NHDOT and the landowners. NHDOT purchases the frontage for the remainder of the property and delimits the access points. Very large properties may only be permitted one or two access points and be required to provide internal circulation.

Limited Access: The most restrictive type of access, it is designed for through traffic, and abutters or other persons have only a limited right of access.

The town may wish to consider developing a formal “Memorandum of Understanding” with NHDOT regarding any permitting of curb cuts along state highways. The memorandum could require applicants to include access management practices in the site development plans for land adjacent to state highways in town prior to the issuance of curb cut permits.

Existing Traffic Volume and Trends

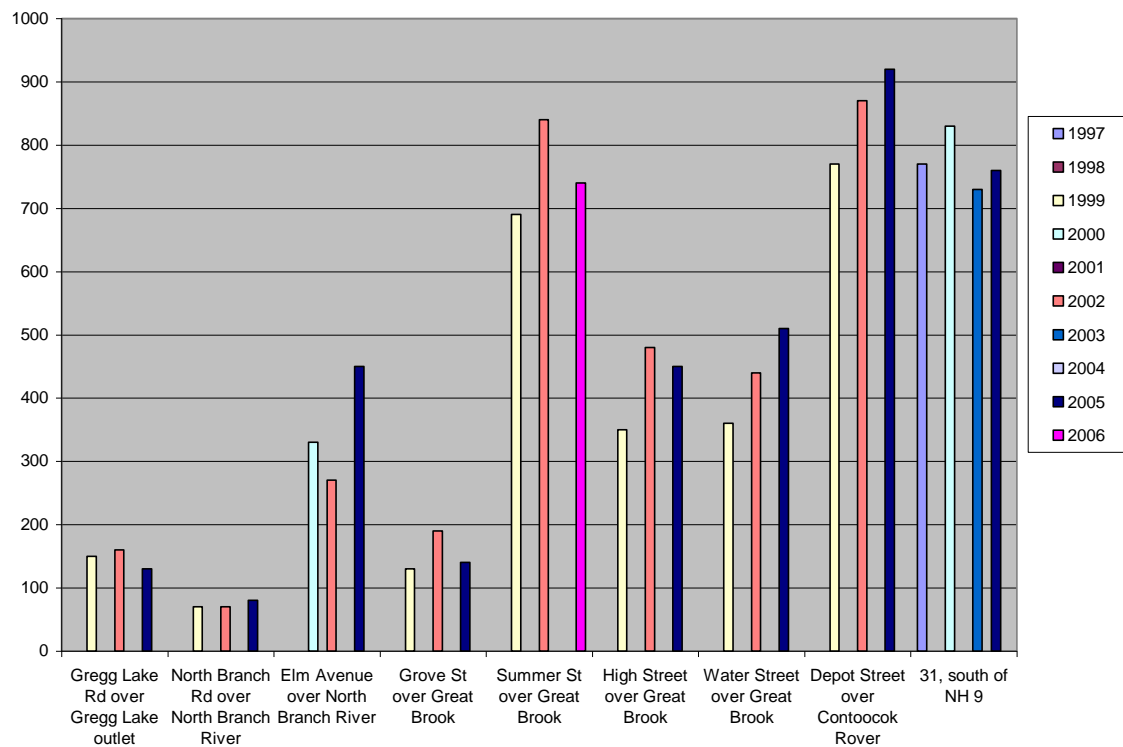
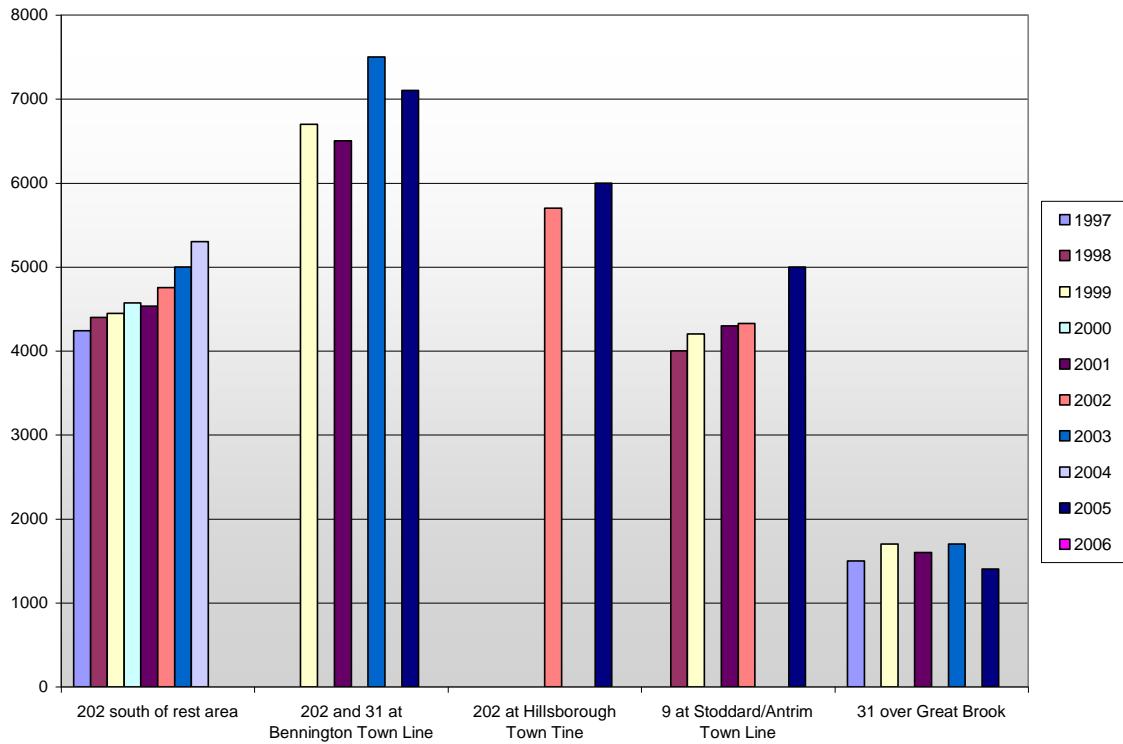
The gathering of information relative to traffic volumes helps the Planning Board identify not only how many vehicles a day are using the roads, and therefore impacting the infrastructure, but also where traffic is going. This knowledge is necessary in order to plan for future road improvements and new road construction. NHDOT collects average daily traffic counts (ADTs) around the state on a continual basis. Some traffic counting devices are permanently installed and provide figures based on a full year count, while others are set out on a rotating basis around the state for varying lengths of time, generally during the months of May to October, although counts are occasionally taken during other months. The permanent counters are placed only on state roads; the temporary counters are placed on state and local roads.

Traffic count data for Antrim roads are presented in the table below. Available information shows the average daily traffic at 16 locations within and on the borders of Antrim. The 2006 data is the most recent data collected for Antrim. Of these 16 locations, only the site on Route 202 south of the rest area is a permanent counter location. Note that counts were not taken every year so there are gaps in the information. Nine of the 16 locations are at various bridges around town; these counts began to be taken in 1992, too recent for any meaningful trend analysis to be developed.

According to this information, Routes 202 and 31 at the Bennington town line see the greatest amount of traffic. Three other sites in town follow closely. They are: Route 202 at the Hillsborough town line, Route 9 at the Stoddard town line, and Route 202 south of the rest area.

Antrim Daily Traffic Samples, 1997 - 2007											
Year:	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
US 202, south of Rest Area)	4241	4397	4446	4570	4532	4752	4997	5303	*	*	*
NH 31, south of NH 9	770	*	*	830	*	*	730	*	760	*	*
US 202 & NH 31, at Bennington TL	*	*	6700	*	6500	*	7500	*	7100	*	*
US 202 at Hillsborough TL	*	*	*	*	*	5700	*	*	6000	*	*
Gregg Lake Rd over Gregg Lake Outlet	*	*	150	*	*	160	*	*	130	*	*
North Branch Rd over North Branch River	*	*	70	*	*	70	*	*	80	*	*
Elm Ave over North Branch River	*	*	330	*	*	270	*	*	450	*	*
NH 31 over Great Brook	1500	*	1700	*	1600	*	1700	*	1400	*	*
Grove St over Great Brook	*	*	130	*	*	190	*	*	140	*	*
Summer St over Great Brook	*	*	690	*	*	840	*	*	*	740	*
High St over Great Brook	*	*	350	*	*	480	*	*	450	*	*
Water St over Great Brook	*	*	360	*	*	440	*	*	510	*	*
Depot St over Contoocook River	*	*	770	*	*	870	*	*	920	*	*

Source: NHDOT, Transportation Planning, 5/12/08



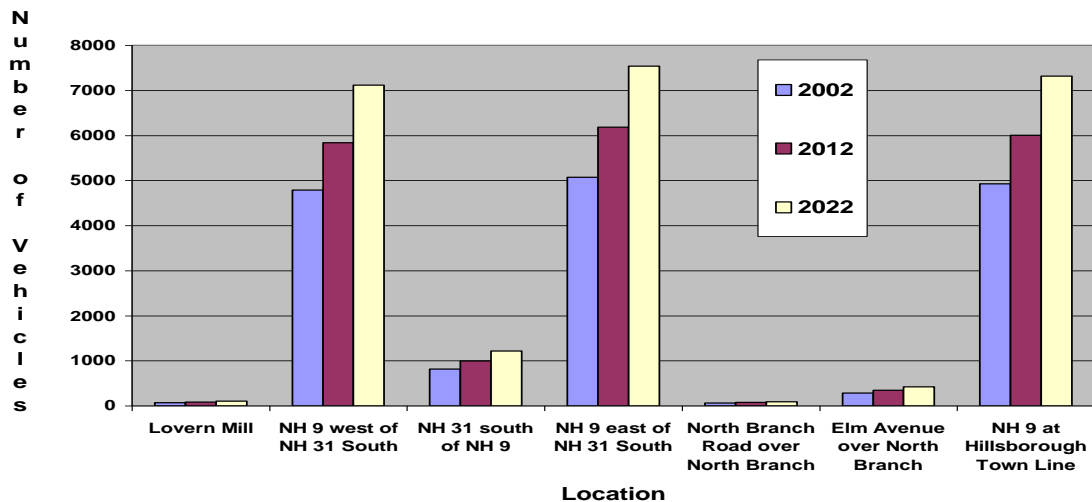
Future Traffic Growth

Data from Southwest Regional Planning Commission from its study of the Route 9 corridor further illustrates the growth in traffic in Antrim and projects traffic growth, assuming 2% annual growth.

	Average Saturday			Average Sunday			Average Weekday			Average Daily		
Location	2002	2012	2022	2002	2012	2002	2002	2012	2022	2002	2012	2022
	Observed	Projected		Observed	Projected		Observed	Projected		Observed	Projected	
Loveren Mill over North Branch	98	118	144	37	45	55	90	110	134	70	85	104
NH 9 west of NH 31 South	5,600	6,826	8,231	5,634	6,868	8,372	5,574	6,795	8,283	4,790	5,839	7,118
NH 31 south of NH 9	938	1,143	1,394	829	1,011	1,232	987	1,203	1,467	816	995	1,213
NH 9 east of NH 31 South	5,486	6,687	8,152	5,661	6,901	8,412	4,870	5,937	7,237	5,071	6,182	7,535
North Branch Road over North Branch	45	55	67	78	95	116	79	96	117	62	76	92
Elm Avenue over North Branch	309	377	459	336	410	499	339	413	504	285	347	423
NH 9 at Hillsborough Town Line	5,828	7,104	8,660	6,046	7,370	8,984	5,647	6,884	8,391	4,923	6,001	7,315

Source: Southwest Regional Planning Commission Route 9 Corridor Study

Average Daily Traffic, Projected to 2022



Traffic generators

The land uses within Antrim that generate traffic are predominantly residential. Antrim does have a concentration of retail/service activity in the downtown that generates traffic from within and outside of Antrim. Hawthorne College, which was a major traffic generator for the town, is no longer in operation. The current use of the campus as a School of Vedic Science does not generate the same level of traffic as previously. Frameworks, a company in the downtown employs 70 people who commute daily to Antrim. This is a large traffic generator at this time.

Existing Roadway Conditions

In order to adequately plan for future road improvements, it is necessary to first identify existing deficiencies in the transportation system. Deficiencies include such problem areas as roads with substandard width, inadequate or deteriorated bridges, poorly designed intersections, deteriorating road surface and shoulders, and poor drainage. The Antrim Highway Department follows a carefully planned schedule of road improvements and reconstruction. In effect now for about 10 years, the Road Construction Program has allocated funds at town meeting each year to completely rebuild a designated section of (paved) road. The goal of the department is to complete between a mile to a mile and a half of roadway each year. This program has been very successful and is nearing completion of its ultimate goal. At that point, of course, the program starts all over again, but this time beginning from a better starting point. As noted above, this program is intended only for the paved roads in Antrim; the gravel roads are maintained annually and, at this point in time, are not a source of concern for the department.

Bridges

Bridges present an ongoing maintenance and repair concern for all towns, oftentimes accounting for a large portion of local highway budgets. Bridges also present the potential for a number of safety hazards in instances where they are severely deteriorated, or are significantly narrower than the roads they serve. There are 23 bridges in Antrim: 7 are state-owned and the remaining 16 are town-owned. The following map shows the location of these bridges in Antrim and the table presents some of the information collected for bridges by NHDOT.

State owned and municipally owned bridges around the state are reviewed periodically by personnel from NHDOT. During these reviews, the bridges are evaluated based on federal standards and guidelines. Any bridge shown to have structural deficiencies or other specific identifiers is placed on the “Red List”. Every bridge on the Red List is inspected once (locally owned) or twice (state-owned) annually to monitor any changes that may make the bridge unsafe.

Antrim currently has three bridges that are red listed: the West Deering bridge over the Contoocook, the Old North Branch Road bridge, and one of the Depot Street bridges (Bridge Number 183/071). The oldest bridge in Antrim is on the Old North Branch Road,

and was built in 1910. The newest bridge in town is the Summer Street bridge, replaced in 2005 after extensive flooding in April 2004. All bridges have been inspected between 2003 and 2006. There are six bridges classified by NHDOT as being functionally obsolete (FO), which simply means that these bridges are carrying more traffic volume today than they were originally designed to carry

Bridge #	Location	Owner	Year Built	Length (in feet)
032/101	West Deering over Contoocook River	Owned jointly with Deering	1905	82
087/135	Loveren Mill Road	Town	1992	74
113/143	Liberty Farm Road	Town	1991	33
117/093	Craig Road	Town	1997	20
119/091	Gregg Lake Road (FO)	Town	1997	36
130/149	Old North Branch Road (FO)	Town	1910	47
	NH Route 31	State	1977	13
	NH Route 9	State	1951	69
141/146	Elm Avenue	Town	1984	64
	NH Route 31	State	1971	10
	NH Route 31	State	1915	12
	NH Route 31	State	1941	10
172/078	Grove Street (FO)	Town	1935	18
173/074	Summer Street	Town	2005	10
173/075	West Street	Town	1988	14
174/070	High Street	Town	1960	13
	US 202, NH 31	State	1947	13
	US 202	State	1939	18
178/069	Water Street	Town	1978	10
179/084	Elm Street	Town	1935	16
181/071	Depot Street (FO)	Town	1914	12
183/071	Depot Street (FO)	Town	1947	27
184/071	Depot Street (FO)	Owned jointly with Bennington	1946	77

Source: NHDOT



The oldest bridge in Antrim, on Old North Branch Road

According to the NHDOT Bridge and Status Report dated December 1, 2008, the following is the current status of bridge projects in Antrim. Note that costs at the time of construction may exceed the estimate of the state.

Projects Authorized for Construction 2008:

- White Birch Point, bridge replacement. Current estimate: \$413,449.00; Town share: \$77,573.15. Complete, awaiting audit.
- North Main Street, bridge replacement. Current estimate: \$718,107.72; Town share: \$143,621.54. Under construction.

Projects Authorized for Construction 2009:

- Old North Branch Road, bridge replacement. Current estimate: \$348,460; Town share: \$69,692.00 Under design. Red listed.
- Depot Street over Contoocook River, Phase I, bridge rehabilitation. Current estimate: \$108,645.00; Town share (including Bennington's share): \$21,719.00. Under design. Antrim-Bennington project. Red listed.
- West Deering Road over Contoocook River, bridge rehabilitation. Current estimate: \$470,000.00. Town share (including Deering's share) \$94,000.00. Under design. Deering-Antrim project. Red listed.

Projects Authorized for Construction 2010:

- Water Street over Great Brook, bridge replacement. Current estimate: \$340,000.00; Town share: \$68,000.00. Under design.

Projects Authorized for Construction 2011:

- Depot Street over relief, bridge replacement. Current estimate: \$285,000.00; Town share: \$57,000.00. Under negotiations.
- Depot Street over Contoocook River overflow, bridge replacement. Current estimate: \$375,000.00; Town share: \$75,000.00. Under negotiations.

Projects Authorized for Construction 2012:

- Depot Street over Contoocook River Phase II, bridge rehabilitation. Current estimate: \$670,000.00; Town share: \$134,000.00.

Projects Authorized for Construction 2013:

- Craig Road over brook, bridge replacement. Current estimate: \$220,000.00; Town share: \$44,000.00. Under negotiations.

In a proactive effort to keep on top of bridge maintenance and repair, in January 2006, the town engaged the services of the engineering firm of Quantum Construction Consultants, LLC of Concord. The firm established a bridge inspection and repair program to identify and prioritize bridge repairs, which will assist the town in planning and funding bridge maintenance and repair in the future.



Summer Street Bridge

Hazardous Conditions/Accident Locations

Conditions that make for hazardous travel are typically related to design or physical features, such as steep grades, narrow roadways, sharp curves, etc. Discussion with the Police Chief indicates that for Route 9, speed is the major contributing factor for the accidents. According to the Antrim Road Agent, there are no particular design features of the local road network that account for or contribute to any particular hazards.

Antrim Fatal Crashes, 1995 - 2006		
Year	# of Fatalities	Location
1995	0	
1996	0	
1997	1	Route 9, Twin Bridges Area
1998	0	
1999	0	
2000	1	Route 31
2001	0	
2002	1	Route 9, near Stoddard Line
2003	3	Route 9: 9/10/03; Route 9: 11/11/03; Route 9: 12/8/03
2004	0	
2005	0	
2006	1	Route 9

Source: NH Department of Highway Safety

Accident Breakdown, January 2000 through March 2006						
Location	Injuries	Fatalities	OUI	Pedestrian	Bicyclists	# of Accidents
Clinton Rd	8			1		32
Concord Rd	2					8
Concord St	25	2	7	1		63
Depot St	3		1			10
Elm Ave	1			1	1	7
Keene Rd	25	1	6			65
Main St	14					45
Pleasant St	1		1			7
Route 202	8					20
Route 31	3					5
Route 9	7	1				20
Smith Rd	1		1			8
West St	1				1	
Total:	125	4	17	3	2	392

Source: Antrim Police Department

Alternative Modes of Transportation

The focus of this analysis has been on vehicular, private transportation. Pedestrian and bicycle traffic is limited in this region outside of the cities. Most roads were designed and built with little or no consideration for anything but vehicles; pedestrians and bicyclists must often share the road with cars and trucks in Antrim. In recent years there has been an increase in both pedestrian and bicycle traffic, and with it a recognition of the potential dangers of mixing these uses with vehicular traffic. These issues can be partly addressed at the local level by designing new transportation systems with attention to alternative modes of travel. With existing roads the problems are more difficult since the Road Agent is dealing with a circumscribed width in most cases; warning signs, speed limits, and education are three methods that can help ameliorate the conflicts.

The visioning process during this master plan update uncovered a desire on the part of a great many of Antrim's residents for improved pedestrian and bicycling paths and trails. Land use regulations should be reviewed to provide for paths and trails when new subdivisions are being planned and that the Recreation, Conservation and Open Space Committees actively pursue opportunities for creation and expansion of trails and paths.

Sidewalks

The only area of town with sidewalks is the downtown. In 2005-2006 sidewalks in the immediate downtown area were completely redone, with the help of a grant from the Federal Government Transportation Enhancement Fund. The town has recently been notified that it has received an additional Enhancement Fund grant to replace the sidewalks extending from Concord Road north to Elm Street and up Elm Street to North Main Street. In addition, the town received a grant in 2008 from the Safe Routes to School Program to finish the sidewalk on Highland Avenue, to create new crosswalks, for new signage and bike racks, and to educate the public.

Bike Paths

An abandoned railroad line is located just to the east of Antrim and is easily accessible from Route 202 in Bennington. The line runs adjacent to the Contoocook River through Deering to the paper mill in Bennington. For at least nine years, this railroad bed has been actively maintained as a multi-use recreational trail. The NH Department of Resources and Economic Development is responsible for overseeing the trail management. However, the local snowmobile club and conservation commission of Deering have been taking care of regular maintenance. This can be explored further to develop a recreational opportunity for the town.

Public Transportation

Public transportation plays a very small role in the overall transportation service network in Antrim. For Antrim residents there are limited transportation alternatives available at this time. The lack of public transportation services available are a concern to citizens. If

Antrim is going to rely on the bigger towns to provide the “shopping centers” for our residents, then we must find ways for the residents to be able to get to them. It is anticipated that, as the population ages, more and more residents will be unable to drive themselves to needed appointments and services.

In 2006, the town leased a “Community Bus” which is being used by the Recreation Department both for its programs and to provide limited bus service to Peterborough Plaza one day a week. The town should explore opportunities to expand usage of the bus to assist senior citizens and others in need of transportation.

A program called Rural Rides serves the towns of Antrim and Bennington; it is sponsored jointly by Home Healthcare, Hospice and Community Services, the American Red Cross, and residents of both towns. Red Cross volunteers from both towns provide door-to-door service for trips to medical appointments, shopping, and other personal business for people who have no access to private transportation. The service is primarily to Peterborough and Hillsborough. The Grapevine also assists those in need of transportation, matching those in need through their People’s Service Exchange.

Several years ago, the “Under One Roof” Project in Peterborough submitted a proposal to the Endowment for Health for a regional Community Transportation planning grant. This initiative has resulted in the recently incorporated non-profit Contoocook Valley Transportation Company (CVTC) which is exploring methods to provide transportation to those in need including volunteer driver networks, rideboards, and ride sharing. Antrim currently has an active volunteer driver network, and members of the community are working with CVTC to bring more transportation services to the community.



The Antrim Community Bus

State and Regional Efforts

In 2007, the State of New Hampshire established a State Coordinating Council (SCC) for Community Transportation in an effort to coordinate community transportation services throughout the state. The Council came about as a result of a Governor's Task Force in Community Transportation which recommended "a state-level body to oversee the development of a coordinated system, regional councils to design and implement coordinated services around the state, and regional transportation coordinators, which would arrange trips through a 'brokerage' system of varied funding sources and a network of providers."¹ With limited resources, a growing budget deficit and an aging and growing population, the state is facing many of the same problems as towns such as Antrim: how to make the existing resources go further, coordinate the resources that are currently available to eliminate duplication and provide more services for the ever growing needs of the state's inhabitants.

The SCC is composed of representatives from a number of state agencies, including the Departments of Transportation and Health and Human Services, as well as transit providers, the UNH Institute on Disability, AARP, Easter Seals, the community action agencies, regional planning commissions, the Coalition of Aging Services, the Endowment for Health, and Granite State Independent Living. The Regional Coordinating Councils (RCCs) are in the process of being organized throughout the state. Antrim is part of Region 6, composed of thirteen towns in the eastern Monadnock region:

<i>Antrim</i>	<i>Bennington</i>	<i>Dublin</i>	<i>Francestown</i>	<i>Greenfield</i>
<i>Greenville</i>	<i>Hancock</i>	<i>Jaffrey</i>	<i>New Ipswich</i>	<i>Peterborough</i>
<i>Rindge</i>	<i>Sharon</i>	<i>Temple</i>		

At the monthly meeting of the SCC on April 1, 2010, the application of the members of Region 6 to be recognized as the RCC for the eastern Monadnock area was unanimously approved by the SCC, which noted the wide diversity of stakeholders that were represented in the application. Spearheaded by Southwest Regional Planning, this RCC (known as EMRCC), is now working to develop a governing structure, to inventory the existing transportation services in the region and to bring more stakeholders to the table in order to fulfill its mission; *"to implement and facilitate a community transportation coordination framework in the Eastern Monadnock Region that encourages participation, involvement and support from the entire community and successfully facilitates the creation of inter- and intra-regional services to benefit transportation users, providers, and purchasers."*²

One of the most important functions of the EMRCC will be to select a Regional Transportation Coordinator (RTC), which will act as a broker of transportation services for the region. The RTC will contract with transportation providers to supply rides,

¹ <http://www.nh.gov/dot/programs/scc/about.htm>

² <http://swrpc.org/trans/rcc6.htm>

maintain a call center, schedule services, collect data, provide billing services and report back to the EMRCC, which is responsible for oversight of the RTC. Because of funding issues at the state level, it is currently unclear how quickly the EMRCC can establish these services. CVTC is working closely with the EMRCC in its efforts to expand transportation services to the region.

Problem Areas/Intersections

There have been many comments elicited through the master plan revision process concerning the intersection of Route 202 and 31 where traffic from the T-Bird, Laconia Savings Bank, Antrim Market Place and the Baptist Church all converge. The town should continue its involvement with regional and state transportation officials as it is expected that the traffic at this location will continue to increase.

Speeding in other areas of town, particularly Gregg Lake Road, was also cited as a concern by many respondents to the Master Plan Survey. The Police Department has employed the speed trailer on various routes in town as a traffic calming measure. Respondents also expressed the desire for stricter enforcement of our speed limits.



Intersection of Routes 31 and 202 at TBird

Transportation Planning Recommendations

There are a number of strategies the town and Planning Board can employ to address our transportation issues. These include:

- **Focus development in residential zones.** Provide for mixed uses and higher densities than in the outlying areas of town. This approach can alleviate heavy traffic, be it residential or commercial, on roads that may not be suitable for such traffic by encouraging pedestrian and bicycle traffic.
- **Set development boundaries along a corridor.** Ensure that any adjacent sensitive natural resources along a corridor will not be threatened by development. Identify areas along highways that can serve as “centers” for commercial development, with access provided by an interior road, rather than from the highway.
- **Interconnect developments.** For non-residential sites, require developers to provide easements across their property to an adjacent site through the Site Plan Review Regulations. When the adjacent site is developed, the easement can be used to connect the two sites with a service road and pedestrian facilities, allowing customers to move from site to site without exiting to the main road. Through the subdivision regulations, require developers to connect development roads or require that a right of way be provided to the adjacent site, so that a connecting

road can be constructed when the neighboring lot is developed. Discourage permanent cul-de-sacs and single point of entry developments.

- **Major collectors and arterial highways:** recognize the advantages of preserving the capacity and free flow characteristics of Antrim's major collectors and arterial highways that serve as regional corridors.
- **Plan for pedestrian and bicycle connections.** Whenever new subdivision roads are being proposed or NHDOT is planning any improvements on state-maintained roads in Antrim, Antrim has an opportunity to request bike paths along the roadsides. In addition, off-road connections can be identified and mapped, and efforts undertaken to secure easements for public use.
- **Develop and adopt a road policy.** The planning board, in conjunction with the selectmen, can develop a road policy to guide development in town based on the status of existing roads and future plans for roads. This can go far to ameliorate potential questions and problems when applications are submitted for the upgrading of a road, or for a building permit on a substandard Class V or Class VI road.
- **Impact fees:** Communities face the problem of having to upgrade local infrastructure as new development occurs. RSA 674:21 authorizes communities to adopt impact fee programs to offset the costs of expanding services and facilities that communities must absorb when a new home or commercial unit is constructed in town. The amount of the fee is developed through a series of calculations and is charged at the time a building permit is issued. Antrim may want to consider the implementation of an Impact Fee System.
- **Local option for transportation improvements:** RSA 261:152 VI (a) grants municipalities the ability to institute a surcharge on all motor vehicle registrations through a vote at Town Meeting, for the purpose of funding the construction or reconstruction of roads, bridges, public parking areas, sidewalks and bicycle paths. Funds generated under this law may also be used as matching funds for state or federal projects. The maximum amount of the surcharge permitted is \$5, with \$.50 reserved for administering the program. This would not apply to off-road vehicles, motorcycles, or antique automobiles.
- **Identify appropriate land uses.** Existing land uses can be monitored and regulations and ordinances reviewed to ensure that development is compatible with the road system. Applications for development should be reviewed with the scale of the proposal relative to the road network and abutting land uses in mind.
- **Continue the capital improvements program.** In conjunction with the Road Policy, the Capital Improvements Committee can set the proposed schedule for road improvements for a six (6) year period, including the degree and type of improvements to be made.
- **Continue monitoring the progress of the EMRCC and provide**

representation to CVTC. Antrim currently has an active volunteer base providing rides through CVTC, a Town Representative to CVTC's "Town Rep" Committee and an Antrim resident on the Board of Directors of CVTC. The Town should continue to support the activities of both CVTC through active representation and monitoring of their progress in expanding community transportation options to the town and region.

Subdivisions and Site Plan Recommendations

- **View the whole parcel.** It is important to step back from an individual plan and look at it in relation to the neighboring properties and land uses. If the lot fronts on more than one road, decisions can be made about which roads would better serve as access, how the parking should be laid out, etc.
- **Lot layout.** Shared driveways or an interior street should be considered in a multi-lot subdivision, with lots fronting off of the interior road rather than the main frontage road.
- **Parking lot location and design.** Some recommendations for commercial parking lots are (1) locate the building(s) close to the road and put the parking on the side or in the rear of the parcel; (2) require shared parking, when feasible or plan for future shared parking; (3) prohibit parking and loading that requires backing out into the street; and (4) require the use of vegetative buffers between parking lots and roads.
- **Impact fee:** Antrim should consider creating an impact fee for roads to be assessed on new development within Antrim to keep pace with development for expansion and maintenance of roads within the town.

Conclusion

The overall goal of transportation planning is to create and maintain a convenient and efficient transportation network to allow the safe transfer of goods and people throughout Antrim while protecting the aesthetic and scenic qualities of the roads within the town and maintaining the rural character of the town in the face of increased development and traffic. This chapter's recommendations encourage the use of best practices to enhance and improve the existing roadway infrastructure and new development in ways that are cost effective, less intrusive, and more acceptable to the community.